

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. - 5. (Canceled)

6. (Currently Amended) A process for preparing a sol, ~~of a phosphate of cerium according to claim 1, comprising the following steps:~~ the sol comprising:
an aqueous phase; particles of a phosphate of one rare earth consisting of cerium; an acid other than phosphoric acid, a cerium salt of which is soluble in water, wherein the particles of phosphate are orthophosphates, and wherein said acid is selected from the group consisting of acetic acid, formic acid, citric acid and propionic acid, the process comprising:

- mixing a solution of salts of cerium with phosphate ions in a PO_4^{3-} /cerium mole ratio of more than 1 with control of the pH of the reaction medium to a value of more than 2;
- then ageing the precipitate obtained if the value of the pH of the reaction medium is in the range 2 to 6;
- separating the precipitate from the reaction medium;
- re-dispersing said precipitate in water;
- adding cerium and said acid to the dispersion in a quantity such that the final PO_4^{3-} /cerium mole ratio in the dispersion is equal to 1.

7. (Currently Amended) A process for preparing a sol₁ of a phosphate of cerium according to claim 1, comprising the following steps: the sol comprising:

an aqueous phase; particles of a phosphate of one rare earth consisting of cerium; an acid other than phosphoric acid, a cerium salt of which is soluble in water, wherein the particles of phosphate are orthophosphates, and wherein said acid is selected from the group consisting of acetic acid, formic acid, citric acid and propionic acid, the process comprising:

- continuously introducing, with stirring, a first solution of salts of cerium into a solution containing phosphate ions and with an initial pH of less than 2; the phosphate ions being present in a quantity such that the PO_4^{3-} /cerium mole ratio is more than 1;
- controlling the pH of the reaction medium to a substantially constant value of less than 2 during precipitation;
- separating the precipitate from the reaction medium;
- re-dispersing said precipitate in water;
- adding cerium and said acid to the dispersion obtained in a quantity such that the final PO_4^{3-} /cerium mole ratio in the dispersion is 1.

8. (Previously Presented) A process according to claim 6, wherein the pH of the precipitation medium is controlled by adding a basic compound.

9. (Previously Presented) A process according to claim 8, wherein said basic compound is ammonium hydroxide.

10. (Previously Presented) A process according to claim 6, wherein said phosphate ions are in the form of an ammonium phosphate solution.

11. - 19. (Canceled)

20. (Currently Amended) A process for preparing a sol of a phosphate of lanthanum according to claim 14, comprising the following steps the sol comprising:

an aqueous phase; particles of a phosphate of one rare earth consisting of lanthanum; an acid with a pK_a of at least 3, other than phosphoric acid, a lanthanum salt of which is soluble in water, wherein the particles of phosphate are orthophosphates, and wherein said acid is selected from the group consisting of acetic acid, formic acid, citric acid and propionic acid, the process comprising:

- mixing a solution of salts of lanthanum with phosphate ions in a PO_4^{3-} /lanthanum mole ratio of more than 1 with control of the pH of the reaction medium to a value of more than 2;
- then ageing the precipitate obtained if the value of the pH of the reaction medium is in the range 2 to 6;
- separating the precipitate from the reaction medium;
- re-dispersing said precipitate in water;
- adding lanthanum and said acid to the dispersion in a quantity such that the final PO_4^{3-} /lanthanum mole ratio in the dispersion is equal to 1.

21. (Previously Presented) A process according to claim 20, wherein the pH of the precipitation medium is controlled by adding a basic compound.

22. (Previously Presented) A process according to claim 21, wherein said basic compound is ammonium hydroxide.

23. (Previously Presented) A process according to claim 20, wherein said phosphate ions are in the form of an ammonium phosphate solution.

24. (Currently Amended) A process for preparing a sol of a phosphate of lanthanum according to claim 14, comprising the following steps: the sol comprising: an aqueous phase; particles of a phosphate of one rare earth consisting of lanthanum; an acid with a pK_a of at least 3, other than phosphoric acid, a lanthanum salt of which is soluble in water, wherein the particles of phosphate are orthophosphates, and wherein said acid is selected from the group consisting of acetic acid, formic acid, citric acid and propionic acid, the process comprising:

- continuously introducing, with stirring, a first solution of salts of lanthanum into a solution containing phosphate ions and with an initial pH of less than 2; the phosphate ions being present in a quantity such that the PO_4^{3-} /lanthanum mole ratio is more than 1;
- controlling the pH of the reaction medium to a substantially constant value of less than 2 during precipitation;
- separating the precipitate from the reaction medium;
- re-dispersing said precipitate in water;
- adding lanthanum and said acid to the dispersion obtained in a quantity such that the final PO_4^{3-} /lanthanum mole ratio in the dispersion is 1.

25. - 29. (Canceled)